From: <u>Sue Stantejsky</u>

To: <u>Barajas-Ochoa, Esther@OEHHA</u>

Subject: GLYPHOSATE NSRL

**Date:** Wednesday, June 21, 2017 2:40:19 PM

## OEHHA,

I am astonished that only some of the available studies were used to set the proposed NSRL at 1100 mcg/kg/day. 1100 mcg/kg/day is way too high. Consider the studies that I have listed below – they suggest that there should be virtually NO glyphosate ingested. And what's worse, glyphosate doesn't occur by itself – for example, Roundup includes other chemicals (co-formulants) which have been shown to be 1000 times more toxic than glyphosate alone! So to consider only glyphosate, is to totally underestimate its toxicity as formulated.

Other issues I found with your NSRL include only considering adult bodies, not those of more vulnerable infants and children. Where are the epidemiological studies that are required before setting an NSRL? It apparently did not consider other than food sources of glyphosate contamination — what about everyday environmental contamination that are kids are subject to from weeds being sprayed with glyphosate at playgrounds and backyard weeds? As you can see, the proposed NSRL was set at a level that did not consider the whole realm of contamination due to glyphosate; therefore, the NSRL is woefully underestimating our exposure to this toxin.

If OEHHA followed 25703 CA code of regulations they would consider ALL available studies showing harm, not just those relating to cancer. Some examples:

- \*Multiomics reveal non-alcoholic fatty liver disease in rats following chronic exposure to an ultra-low dose of Roundup herbicide Mesnage, Reney, Seralini, Ward, Antoniou
- \*The Effect of Glyphosate on Potential Pathogens and Beneficial Members of Poultry Microbiota In Vitro Awad A. Shehata Wieland Schro dl Alaa. A. Aldin Hafez M. Hafez Monika Kru ger
- \*Allergy and the gastrointestinal system <u>G Vighi</u>,\* <u>F Marcucci</u>,‡ <u>L Sensi</u>,‡ <u>G Di Cara</u>,‡ and <u>F Frati</u>‡
- \*Genetic Heavy Metal Toxicity: Explaining SIDS, Autism, Tourette's, Alzheimer Tara Lang Chapman
- \*The Effect of Glyphosate on Potential Pathogens and Beneficial Members of Poultry Microbiota In Vitro Awad A. Shehata Wieland Schro"dl Alaa. A. Aldin Hafez M. Hafez Monika Kru"ger
- \*Gut microbial degradation of organophosphate insecticides-induces glucose intolerance via gluconeogenesis Ganesan Velmurugan1\*, Tharmarajan Ramprasath2, et al.

- \*Glyphosate induces human breast cancer cells growth via estrogen receptors. Thongprakaisang S1, Thiantanawat A, Rangkadilok N, Suriyo T, Satayaviyad J.
- \*Increase of non-Hodgkin's Lymphoma, <u>International Agency for Research on Cancer</u> in International Journal of Environmental Research and Public Health
- \*Non-Hodgkin Lymphoma and Occupational Exposure to Agricultural Pesticide Chemical Groups and Active Ingredients: A Systematic Review and Meta-Analysis <a href="http://www.mdpi.com/1660-4601/11/4/4449/htm">http://www.mdpi.com/1660-4601/11/4/4449/htm</a> Leah Schinasi and Maria E. Leon <a href="http://www.gmoevidence.com/dr-schinasi-glyphosate-herbicides-linked-to-non-hodgkins-lymphoma/">http://www.gmoevidence.com/dr-schinasi-glyphosate-herbicides-linked-to-non-hodgkins-lymphoma/</a>
- \*Integrative assessment of multiple pesticides as risk factors for non-Hodgkin's lymphoma among men A J De Roos, S H Zahm, K P Cantor, D D Weisenburger, F F Holmes, L F Burmeister, A Blair
- \*https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1740618/pdf/v060p00e11.pdf

In Mesnage and Antoniou's study, 4 nanograms per kg caused liver disease which predisposes cancer. This level is 4000 times lower than the proposed NSRL.

Carrusco's and Monika Kruger's studies, glyphosate has shown to **destroy beneficial gut bacteria at 0.1ppb** and promote the proliferation of pathogenic gut bacteria.

High levels of daily glyphosate exposure can create an environment in the gut for Candida and fungus cause inflammation which can contribute to autoimmune disease and cancer.

Destroyed gut bacteria cannot expel heavy metals properly. The toxins build up in the liver and the body, which can lead to cancer.

When glyphosate destroys the gut bacteria, the gut biome can no longer make essential hormones which can lead to multiple forms of cancer such as Thyroid, NHL, breast and reproductive cancers. 1 out of 2 males and 1 out of 3 females in America are expected to get cancer today.

The lowest level of glyphosate showing harm is Thongprangisang's study of 1 ppT showing glyphosate stimulates the growth of breast cancer in vitro. This means, according to the EPA, that the lowest exposure level should be 100 fold less which 10 ppQ. This is millions of times lower than the proposed NSRL.

However, because Ridly and Mirely's and Monika Krueger's studies show that glyphosate bioaccumulates in the bone marrow, that 10 ppQ **should be a one time lifetime exposure, not daily**. **Bioaccumulation is why there is no safe level of glyphosate.** 

Please carefully consider the above studies and results as they show there is no safe level of glyphosate! We are trying to protect our kids – cancer should not be the #1 or #2 killer of our kids. We need to do everything we can to stop this travesty. Glyphosate is found on most

grains (used as a desiccant), corn & soy beans (GMOs), cotton clothing (GMO), animal feeds	-
we then eat the animals, weeds in our yards,EVERYWHERE. This must be stopped!	

Thank you,

Susan Stantejsky